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Injection valve with piezoelectric actuator unit - has
thermal expansion coefficients of actuator and actuator housing
approximately equal to one another to compensate for temperature changes

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Abstract (Basic): EP 869278 A

The injection valve incorporates a controllable actuator (2). This is accommodated in an actuator housing (8) which is rigidly attached to a valve housing (19). The actuator is connected in effect to the injection needle (4) and controls it for fuel injection.

The actuator housing of the valve especially has a coefficient of thermal expansion which is approximately equal to the coefficient of thermal expansion of the piezoelectric actuator. This avoids trouble due to differential expansion during temperature changes.

USE - Fuel injector is especially for use in internal combustion engines.

ADVANTAGE - Length changes of the piezoelectric actuator unit due to temperature variations are achieved without use of a damping chamber.

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Title Terms: INJECTION; VALVE; PIEZOELECTRIC; ACTUATE; UNIT; THERMAL;
EXPAND; COEFFICIENT; ACTUATE; ACTUATE; HOUSING; APPROXIMATE; EQUAL; ONE;
COMPENSATE; TEMPERATURE; CHANGE

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